

I claim:

1. A selectable prioritization method for a data communication switch, comprising the steps of:
 - 5 receiving a plurality of packets including respective first priorities on a first port;
 - generating respective second priorities as a function of the respective first priorities;
 - 10 prioritizing selected ones of the plurality of packets as a function of respective ones of the second priorities; and
 - 15 transmitting the plurality of packets including the respective second priorities on a second port.
2. The method according to claim 1, wherein the plurality of packets have respective source addresses and the ones of packets prioritized as a function of respective ones of the second priorities are selected as a function of respective ones of the source addresses.
- 15 3. The method according to claim 1, wherein the plurality of packets have respective destination addresses and the ones of packets not prioritized as a function of respective ones of the second priorities are prioritized as a function of respective ones of the destination addresses.
- 20 4. The method according to claim 1, wherein the respective first priorities are inbound 802.1Q tag priorities.
5. The method according to claim 1, wherein the respective second priorities are regenerated 802.1Q tag priorities.

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A selectable prioritization method for a data communication switch, comprising the steps of:

5 receiving a packet;

determining a first priority for the packet;

determining whether to mark the packet; and

prioritizing the packet or not in accordance with the first priority as a function of whether the packet is marked or not.

7. The method according to claim 6, further comprising the step of:

10 prioritizing the packet or not in accordance with a second priority as a function of whether the packet is marked or not.

8. The method according to claim 6, wherein the first priority determination is made as a function of a first value in the packet and the marking determination is made as a function of a second value in the packet,

15 wherein the first and second values are different.

9. The method according to claim 6, wherein the first priority is instantiated in the packet upon transmission from the switch.

10. The method according to claim 6, wherein the mark, if any, is a single bit.

11. The method according to claim 6, wherein the mark, if any, is removed

20 from the packet prior to transmission from the switch.

12. The method according to claim 6, wherein prioritization includes applying the packet to a queue determined as a function of the first priority.

13. The method according to claim 7, wherein prioritization includes applying the packet to a queue determined as a function of the second priority.

14. The method according to claim 8, wherein a second priority is determined as a function of a third value in the packet, wherein the first and second and third values are different.

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15. The method according to claim 8, wherein the first value is a tag priority.

16. The method according to claim 8, wherein the second value is a source address.

17. The method according to claim 13, wherein the third value is a destination address.

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18. A data communication switch, comprising:

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a first network interface for receiving a packet from a first network, for determining a first priority for the packet, for determining whether or not to mark the packet and for transmitting the packet; and

a second network interface coupled to the first network interface for receiving the packet, for prioritizing the packet or not in accordance with the first priority as a function of whether the packet is marked or not and for transmitting the packet to a second network.

19. The switch according to claim 18, wherein the second network interface is operative for prioritizing the packet or not in accordance with a second priority as a function of whether the packet is marked or not.

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20. The switch according to claim 18, wherein the first network interface is operative for determining the first priority as a function of a first value in

the packet and is operative for determining whether or not to mark the packet as a function of a second value in the packet, wherein the first and second values are different.

21. The switch according to claim 20, wherein the second network interface is operative for determining a second priority as a function of a third value in the packet, wherein the first and second and third values are different.
22. The switch according to claim 18, wherein the mark, if any, is a single bit.
23. The switch according to claim 18, wherein the mark, if any, is removed from the packet prior to transmitting the packet to the second network.
- 10 24. The method according to claim 20, wherein the first value is a tag priority.
25. The method according to claim 20, wherein the second value is a source address.
26. The method according to claim 21, wherein the third value is a destination address.

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